Southwest Idaho Region 3 Water Awareness Week 2001 Program Summary



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Background

Water Awareness Week is an annual event that is scheduled during the first week of May. The purpose of the program is to provide sixth grade students with the tools and knowledge needed to develop and sustain an awareness of the importance of water in their lives and to lay the foundation for an understanding of the critical water issues they will face as adults.

The program is administered by a state steering committee and implemented by six (6) regional committees. Region 3 is in the southwest portion of the state and covers Adams, Ada, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, Washington counties.

Overview

The activities of 2001 Water Awareness Week Program in Region 3 included the distribution of Channing Bete educational materials, the organization of a water festival, training of festival volunteers, and an evaluation of both the educational materials and the water festival.

The total budget for 2001 was \$5,283.41, which included carryover from the previous year. Most of the 2001 expenditures were for the rental of canopies, tables, chairs, equipment/supplies and purchase of refreshments for the festival. Approximately 646 students attended the festival.

The active members of the regional committee included representatives from the Idaho Department of Environmental Quality (IDEQ), United Water Idaho (UWID), University of Idaho – Cooperative Extension (UICE), City of Boise, and University of Idaho - Project WET.

Educational Materials

The folders with Channing Bete educational materials were delivered to nine (9) school districts, which involved 5401 students and 189 teachers. The distribution of students and teachers in these districts are shown in Table 1.

Table 1. Distribution of Students and Teachers in the Southwest Region

School District	Students	Teachers
Boise	2073	79
Meridian	1623	49
Nampa	859	30
Kuna	232	8
Payette	189	7
Emmett	180	6
Fruitland	120	4
Mountain Home	100	5
Horseshoe Bend	25	1
TOTAL	5401	189

Since the Channing Bete materials have been distributed to Idaho teachers for several years, Region 3 decided to ask the teachers whether they had found the materials useful and interesting.

Each teacher received two (2) evaluation forms, which were distributed with the water education materials. One evaluation form was for the "Let's Make a Splash" materials and the other for the insert called "Understanding Idaho's Greatest Treasure". The purpose of the evaluation was to determine:

- whether the materials were being used;
- teacher and student responses to the materials;
- whether the teachers wanted to continue receiving the same materials; and
- whether the teachers preferred other types of information/materials.

Sixteen (16) evaluations or about 8.5% of the teachers returned completed evaluations.

"Let's Make a Splash" - Evaluation Summary

Thirteen (13) teachers indicated they did use "Let's Make a Splash" in the classroom and most of their students were moderately interested in the information. Three (3) teachers did not use any of the materials. The primary reason for not using the materials was the teacher did not have time to organize the supplies for the activities. One teacher indicated the "Let's Make a Splash" activities did not match the curriculum.

Twelve (12) teachers indicated interest in receiving "Let's Make a Splash" in future years. Four (4) teachers were not interested in receiving the materials again. One teacher said the activities were too basic for the sixth grade level, another preferred activities that would not require organizing the supplies, and another said they could not devote time to water week because it is not in the curriculum.

"Understanding Idaho's Greatest Treasure" – Evaluation Summary

Twelve (12) teachers indicated they used "Understanding Idaho's Greatest Treasure" in their classrooms and most of their students were moderately interested. Four (4) teachers did not use the insert and the main reason was because there was not time in the classroom.

Thirteen (13) teachers wanted to receive the insert in future years, whereas three (3) teachers did not. One teacher thought the insert information should be more related to the festival activities, while another suggested sending one copy to the teacher, who could make copies for the students if needed.

Water Festival Workshop

A workshop for the festival volunteers was held on April 24, 2001 at the Idaho Fish and Game. At the workshop, the regional committee members were introduced, presenters had the opportunity to meet each other, the overall goal of the festival was presented, a discussion on presenter skills and responsibilities was held, the participants visited each activity station location, and the participants were treated to ice cream sundaes.

This training helped reduce festival day confusion since the volunteers gained a better understanding of their responsibilities and general logistics before the festival was held.

Water Festival

The water festival was held on May 15, 2001 in Boise at the United Water Idaho Water Treatment Facility and at Municipal Park. Twenty-four (24) classes or approximately 646 students attended the festival. Table 2 shows the number of students and classes in school districts that attended the festival.

Table 2. Festival Attendees by School District

School District	Students	Classes
Boise	377	15
Meridian	65	2
Nampa	90	3
Kuna	58	2
Fruitland	56	2
TOTAL	646	24

The festival featured twenty-four (24) stations that provided hands-on activities for the students. A brief description of each featured activity is provided in Attachment A. Three (3) activities were new for the year. These were "All Fired Up About Water", "A-Maze-Ing Water" (Storm Water), and "Trees and Water".

After the festival, teachers, students, and guides were asked to provide input on the activities they attended. The evaluation forms asked for input on:

- clarity and organization;
- if the activity was age appropriate;
- teaching aids;
- whether the presenter was well informed;
- whether the students were interested; and
- · whether the students asked questions.

Graphs were compiled to provide a visual understanding of the results. These are included in Attachment B.

In addition to the written festival evaluation, thirty-one (31) students were interviewed. These interviews revealed that students left with a good understanding of the importance of water conservation, water quality, and the various uses of water.

Budget

The total budget for this region was \$5283.41. This included carryovers from the previous year, funding from statewide sponsors, and Bechtel BWXT Idaho. The total spent for supplies, equipment, rental costs, and refreshments was \$3205.15. The specific costs are listed below.

Date	Transaction	Payment	Deposit	Balance
	Beginning			1383.41
	balance			
03/01/2001	Busar, U of I	32.34		1351.07
04/20/2001	Gail Baker	300.00		1051.07
	Refreshments			
04/20/2001	All About Tents	1221.5		(170.43)
	(tents &			
	canopies)			
05/08/2001	Boise Public		3400.00	3229.57
	Schools			
05/08/2001	Bechtel BWXT		500.00	3729.57
	Idaho, LLC			

05/18/2001	Gail Baker Refreshments		209.97	3939.54
05/18/2001	All About Tents (tents & canopies)	1276.50		2663.04
05/18/2001	ABC Sanitation & Septic	220.5		2442.54
05/23/2001	Rocky Mnt Visual, Inc.	106.00		2336.54
06/04/2001	Janice Engle (reptiles)	200.00		2136.54
06/12/2001	Stan's Golf Cars, Inc.	52.50		2084.04
07/24/2001	Charlie Bryant (candy worms)	5.78		2078.26

Donations

All the festival guides and almost all the presenters donated their time toward this event. In addition, there were other significant contributions, which are listed below.

All About Tents – reduced price on setup rentals
Pepsi – drinks for presenters and volunteers
Bechtel BWXT Idaho - \$500 cash
U.S. Forest Service (NIFC) – radios for the day
MK Nature Center – Trophy Room
Boise City Parks and Recreation – Municipal Park for the day
United Water Idaho – Treatment Plant Facility and surrounding grounds

Conclusions and Recommendations

Several major changes were made for the 2001 Water Festival and all were found to be very beneficial. The changes were:

- Classes were brought in only in the morning, rather than both the morning and afternoon.
 This eliminated logistical confusion and traffic, gave each class more time at the festival, and created a more relaxing atmosphere for the presenters and organizers.
- The change described above allowed fewer classes to participate in the festival.
 However, attending the festival became a privilege rather than an expectation. As a result, most of the classes seemed better prepared and more attentive than in previous years.
- The festival workshop helped the event run more smoothly. This event helped the volunteers to become familiar with the festival layout and expectations before the event.
- The evaluations of the written materials and water festival provided specific input. In the
 past, we relied on observations, assumptions, and in-passing comments from various
 individuals. The methodical evaluation approach provided a broader and more reliable
 form of input.
- The date of the festival was moved until later in the month, compared to previous years.
 The weather, while still drizzly in May 2001, was warmer and thus more comfortable for the students and presenters.

Attachment A. - Activity Summaries

All American Meal

This activity discusses the processes associated with food production in general with an additional emphasis on animal products. Children will be able to identify the ingredients necessary in producing commonly consumed foods.

All Fired Up About Water

The students learn the use and importance of an adequate water supply for fire fighting in urban, rural, and wild land areas.

A-Maze-ing Water

Students learn what storm water is, where it comes from, where it goes, and what's in it. They act as water and meander through a grassy maze simulating natural and man-made drainages, collecting a variety of imaginary pollutants, and deciding whether to go to the river or the treatment plant. At the end, students will brainstorm ideas for keeping storm water clean at home and in their neighborhoods.

ANGLERS

This activity introduces students to the sport of flyfishing. The kids will learn fly fishing terminology, about flies and what imitations are made from, the difference between fly fishing and other kinds of fishing, about catch and release, fly fishing etiquette, and how to fly cast.

DISAPPEARING WETLANDS

Students are introduced to reptiles and their need for a clean place to live. Some of the reptiles that present include a: Savannah Monitor Lizard, Western Terrestrial Garter Snake, Great Basin Gopher Snake, Rubber Boa, Black Pine Snake, Corn Snake, and a Python.

ELECTRICITY FROM WATER

The students learn about renewable energy sources, electricity, how water is used to generate electricity, and the importance of electricity generated from water in Idaho.

HYDROPOWER

This activity demonstrates how much electricity (in watts) it takes to run household appliances that students use every day and why it is important to implement energy conservation programs.

INCREDIBLE EDIBLE AQUIFER

This delicious demonstration teaches students about the different layers of an aquifer and how aquifers become contaminated. Each student constructs their own "aquifer in a glass" ice, soda pop, ice cream, cookie crumbles, and candy sprinkles. Each ingredient represents a different section of an aquifer. Students leave with a solid understanding an aquifer, how to protect the aquifer from contamination and delight in devouring their creations.

INCREDIBLE WATER JOURNEY

This activity provides students the experience of the life cycle of a water molecule as it passes from one environmental medium to another. Children will better understand the hydrologic cycle by becoming a water molecule and moving into and out of clouds, surface water, people, plants, frozen water (icecaps and glaciers), and animals.

KIDS IN THE CREEK

This activity has two parts: 1) the kids gather the macro-invertebrates from the rocks in the river, sort, identify, and determine whether the biological indicators are pollution tolerant or intolerant; 2) the kids use laboratory field kits to analyze the water quality. Both types of analyses are used to determine the overall water quality of the river or stream. The factors contributing to the overall health (or lack of health) the river or the stream are discussed.

LANDFILLS AND HOUSEHOLD HAZARDOUS WASTE

Students learn household hazardous materials or wastes. They discuss the options for taking care of hazardous waste and how they can decrease the amount that is produced. They read "mock" labels and look for signal words, find safety and emergency information, and look for information on proper disposal of the product. Students will also perform an experiment that should reinforce how improper disposal of hazardous products can adversely affect our water.

LIFE IN A LAKE

This activity explores lake water quality monitoring and how it relates to fish health. Students will take part in hands on water quality investigations and will also participate in a skit illustrating the concepts that they have learned.

RAINFALL SIMULATOR

This activity demonstrates the affects of wildland fire on runoff and erosion by having the students participate in a rainfall simulation study. The rainfall simulator will apply water to specially treated small plots. While raining, students will collect runoff and sediment into bottles and record the information onto field data worksheets and discuss the results and the impacts on the land and communities in those areas.

STORMWATER

Students learn what happens to rainwater washes over streets and lawns carrying away soil, pollutants and other materials. Students learn that cities use water to clean the waste from city streets and sidewalks. Often the water goes down storm drains, collects in pipes and goes to the river or the treatment plant. Talk about the differences between water that goes to the river and the water that goes to the treatment plant.

UNITED WATER IDAHO WATER TREATMENT PLANT TOUR

This activity includes an actual tour of the water treatment plant facility. Water treatment is the process of cleaning water and making the water safe for people to drink.

WATER CONSERVATION AND RECYCLING

Students are split into groups representing different businesses. Each 'business' will select materials those items the students use in their business, then determine the items use and ultimate disposal method: reuse, recycle, or landfill. Students will be encouraged to find items that have reuse or recycle value for use in their business with emphasis on material that requires little or no water for its reuse or recycle. An explanation of potential threats to groundwater by improper waste management will be given.

WATER CONSERVATION THROUGH VERMICOMPOSTING

Students learn the alternative to a garbage disposal and the process of conserving water with the process of worms turning food scraps into highly valued topsoil. They learn the parts of a worm and other critters responsible for turning food wastes into "black gold".

WATER CYCLE THROUGH TREES AND OTHER PLANTS

This station explores the travel of water from rainfall or irrigation through a tree and back to the atmosphere. It will show how trees take the water out of the ground, how they use the water and the benefits of trees.

WATER FUN CENTER

This area is primarily just for fun and entertainment. However, some classes may be directed here as a "holding" place if they arrive late for their assigned activity or are in transit from the activity called "Kids in the Creek". The types of activities that will be available are: Super Soaker

Shootout, Kids in a Bubble, Face Painting, Tornado in a Bottle, Water Balloon Toss, Water Relay, and Beanbag Toss.

WATER RECYCLING AND PAPER MAKING

This activity demonstrates the recycling of old materials into paper. Students will mix the materials with water in a blender, pouring the slurry into a paper press, and discussing the conservation of water by reuse of materials.

WATER METER MANIA

The students learn wise water use at home and in the yard. Activities include a water conservation trivia game (fishing for rubber ducks), how to read a real water meter, and water wasting techniques to avoid.

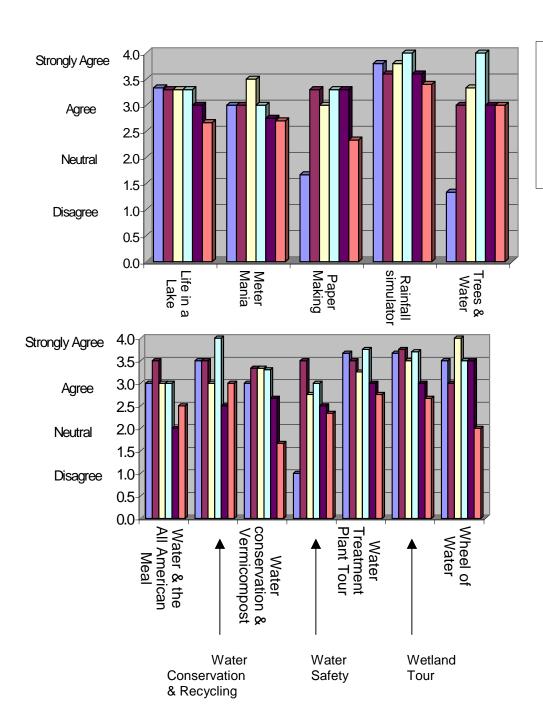
WATER SAFETY

With the assistance of "Bobby the Boat", a three foot tall cartoon character robot, this activity promotes student awareness of safety when boating, swimming, or playing around the water. Students will learn the importance of wearing life jackets, how to conduct themselves around boats, the hazards of swift moving cold water in rivers and canals, the dangers of mixing intoxicating substances with recreation around the water, the health dangers of hypothermia and how to avoid it and treat it.

WEATHER AND THE WHEEL OF WATER

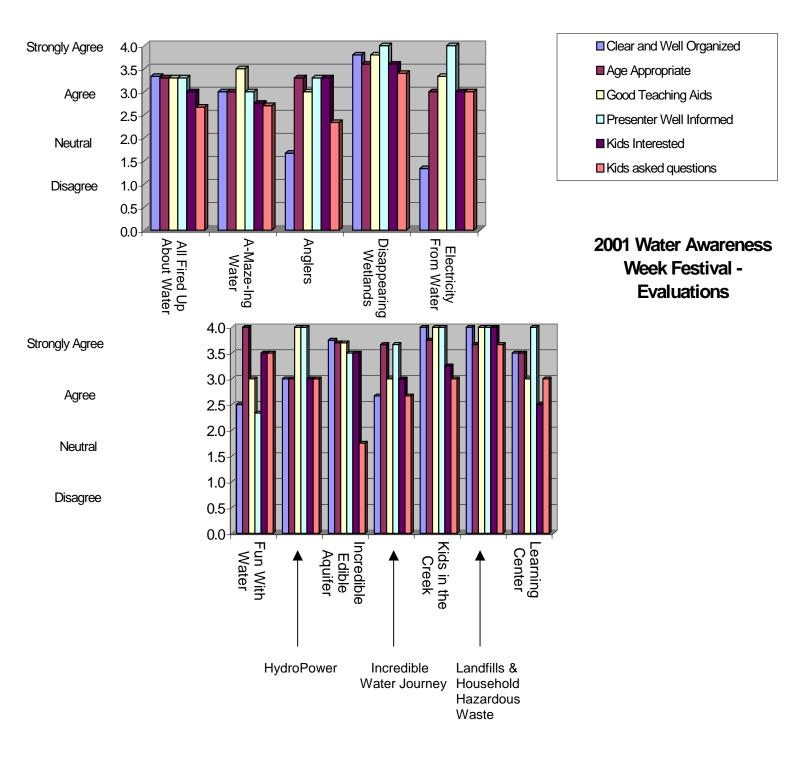
Rick Lantz of K.T.V.B Channel 7 and the Discovery Center host an entertaining game where student teams compete for prizes questions by spinning the "Wheel of Water" for questions on weather and hydrology.

Attachment B. - Festival Evaluation Graphs





2001 Water Awareness Week Festival -Evaluations



Attachment C. - Special Acknowledgements

Ada County Hwy. Dist.

Tom Dillon Rachel Lawrence David Blair Dana Novak

Ada County Parks & Waterways Dept.

Carol Chausow Penny Wonenberg

Ada County Solid Waste

Ted Hutchinson

Bannock County

Therese Wight

BFI

Susan Martin

Boise Fire Department

Jim Gross Jim McCullough Dan Baldwin

Boise Parks & Recreation

Brian Jorganson Dennis Matlock

Boise Valley Fly Fishermen

Mike Ross

Bonneville Power Administration

Allyn Meuleman Andy Thomas Judy & Gary Uhrich

Channel 7 News

Rick Lance Sally Craven

City of Boise Public Works

Walt Baumgartner

Beth Baird Brian Murphy Delie Block Liz Cody Angela Decker Catherine Chertudi Julie Quinn Jennie Rylee Gail Baker Jill Edwards Tammy Parker

Helpful Public

Charley Rains

Idaho Anglers

Joy Knickerman

Idaho Botanical Garden

Elizabeth Dickey Lenise Heath

Idaho Department of Environmental

Quality

Doug Herlocker Bryan Horsburgh Mike Ingham Tom Krinke Angie Peterson Robbyn Freeman Mark Van Kleek Leslie Freeman Ben Nydegger Charlie Bidiondo Linda Boyle Mike Thomas Tonia Mitchell Patti Best **Ted Livieratos** Sally Tarowsky Scott Pitzer

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Rob Barrett
Kevin Smith
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Ben Hepler

Scott Rhead

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Van Water & Rogers

Mike Goddette

Festival Photos

